(bubblers) have fallen out of favor with EPA due to accuracy and sensitivity problems. For instance, EPA requires that proposed major source owners not use these bubbler data in their PSD applications.[1] Neither are bubblers permitted in the National Air Monitoring System.[2] The bubblers at Plymouth sample the air less than 20 percent of the time since they operate only 24 hours every six days. In addition, the SO_2 manual method, being a 24-hour integrated sample, cannot easily be used to document compliance with the three-hour secondary NAAQS for SO_2. For these reasons, the station should be upgraded to use automated continuous monitors.

All air quality monitoring equipment purchased for use in this network must be EPA reference method or designated equivalent continuous automated monitors (except reference method--manual for TSP and lead). Quality control and quality assurance procedures complying with 40 CFR 58 Appendix A.2.2 or B.2.2 must be developed, approved by the permit granting authority, and implemented. Current EPA guidance should be sought regarding the dichotomous sampler prior to purchase, since this equipment is still rapidly evolving and in the midst of evaluation. Meteorological equipment should conform to the requirements set forth in Reference 1 for applicable equipment. For equipment listed in this report but not covered by Reference 1, the advice of a competent professional meteorologist should be sought. The two new monitoring stations should be sited to be representative of their respective portions of the region. A meteorologist should review the particular locations chosen for representativeness and freedom from interference, since meteorological measurements are involved. A well-trained instrumentation technician must be available for calibration and maintenance of analyzers and associated data recording equipment. Guidance on siting, operation and quality assurance may be found in Reference 2 dealing with State and Local Air Monitoring Systems.

In addition to augmentation of the existing State network for purposes of documenting overall regional air quality, implementation of special purpose particulate monitoring systems should also be considered. The primary purpose of such systems would be to determine fugitive emissions and their associated impacts. Reliable fugitive emissions factors simply do not exist for many peat-